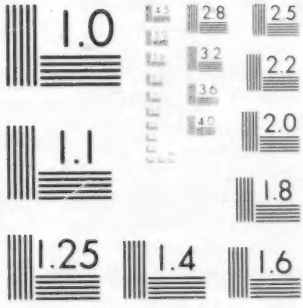

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ABSTRACT

The effects of self-disclosure and attitude similarity on the reduction of interpersonal conflict in a modification of the Prisoner's Dilemma Game were investigated in an experimental study of the behavior of 60 undergraduate students. Results supported hypotheses that self-disclosure and attitude similarity would elicit more conflict-reducing behavior than would nondisclosure or attitude dissimilarity. The effects of self-disclosure were much greater than those of attitude similarity, however, and a predicted interaction between these two factors was not found. (AA)

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THE EFFECTS OF SELF-DISCLOSING COMMUNICATION AND ATTITUDE SIMILARITY ON THE REDUCTION OF INTERPERSONAL CONFLICT

by

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ABSTRACT

It is apparent that social conflict is an integral part of daily life. Despite the frequent assumption that the best strategy is to eliminate conflict from the system, current thinking and research suggest that it is more desirable to maintain a controlled level of conflict for growth and vitality of the system. Knowledge of the ways in which communication can be used to control conflict, however, is insufficient. The purpose of this study was to suggest and experimentally test the effects of one specific form of communication, self-disclosure, and one relational characteristic, attitude similarity, on the reduction of interpersonal conflict. The dependent variable was the amount of conflict-reducing behavior, operationalized through a form of the Prisoner's Dilemma Game, the Creative Alternative Game (Steinfatt).

The sample consisted of 60 male and female undergraduate communication students, tested in discussion rooms. Attitude similarity was operationalized following a method developed by Berscheid, which utilizes a confederate to control the inductions of similarity and dissimilarity. To operationalize self-disclosure, a message was developed and validated by subjects from the experimental population. The confederate communicated this message to the subject prior to the ten experimental C-A game trials. Manipulation checks were performed for both the attitude similarity and self-disclosure inductions.

In separate hypotheses, it was predicted that self-disclosure and attitude similarity would elicit greater amounts of conflict-reducing behavior than non-disclosure or attitude dissimilarity, respectively. Analysis of variance supported both of these main effect predictions. The subsequent Omega-squared tests revealed that self-disclosure accounted for 54 percent of the variance while attitude similarity accounted for seven percent of the variance. It was also hypothesized that self-disclosure would interact with attitude similarity to effect greater amounts of conflict-reducing behavior than any other combination of treatments. Analysis of variance failed to support this prediction.

The results support Gibb's (1965) contention that self-disclosure may induce perceptions of a supportive communication climate, seen here to be the crucial conceptual linkage between communication and successful conflict resolution. The results also support previous research which demonstrates that attitude similarity functions to increase interpersonal attraction and also serves as a persuasive influence. The weak overall strength of association between attitude similarity and conflict-reducing behavior, and the insignificant interaction result make interpretation and generalization of these findings provisional, pending replication. However, numerous directions for future research are discussed.

Statement of the Problem and Related Literature

It is apparent that social conflict, the struggle over values and claims to scarce status, power, and resources (Coser, 1956) is an integral part of daily life. It is also apparent that social conflict promotes discomfort, alienation, cessation of routines and habits, aggression, and hostility.

To deal with this prevalent, discomforting phenomenon, it is frequently assumed that the best strategy is to effect its elimination from the social system. Implicit in this view is the assumption that social systems such as dyads, families, or larger communities can exist and develop through purely cooperative orientations, presumably the total absence of conflict. Current thinking and research, however, suggest that such a conflict-free social system is not only an abstract ideal which is beyond rational expectation but also less than desirable for the continued development of the system. Fisher (1973) critically addresses these issues when he states that

> The typically short-sighted view of common sense would have us believe that a "perfect" social system is worth striving for... the "perfect" social system free from conflict and deviance is doomed to failure because of its inherent inflexibility, its incapacity for growth and progress. (p. 107)

Further, theorists have suggested that the presence of conflict is a better index of a social system's stability than its absence. Perhaps most representative of these views is Simmel, who suggests that

> hostile feelings generated within a relationship are more likely to be expressed if the participants are aware of its stability, for if they are secure they will tend to express their feelings openly. However, if the relationship is such that the participants must fear its dissolution if conflict occurs, they will attempt to repress or displace hostile feelings. (Coser, p. 81)

Although too much conflict can be expected to be dysfunctional for a relationship or social system, the opposite extreme of systemic equilibrium is currently viewed

as both unfeasible and undesirable. Thus, the problem appears to be one of developing strategies for managing or controlling social conflict; i.e. strategies which utilize the productive potential of conflict and simultaneously stave off its discomforting side-effects brought on by loss of control and its resulting escalation. Acknowledging that conflict will occur and will frequently lead to discomforting effects, Keltner also addresses the need for developing a method of controlling social conflict...

> Controversy, competition, combat, and their derivatives are considered valuable as long as they do not result in the destruction of the social values. The problem, however, is to control them so that they do not escalate into wars or destructive systems. (p. 253)

Many divorces, crimes of passion, extended labor disputes, and interpersonal clashes are common examples of social conflict which escalate in the absence of established modes of control.

Many researchers (e.g. Bach and Wyden, 1968; Bodaken, 1971; Coser, 1956; Deutsch 1969; Jandt, 1973; Simons, 1974) have suggested that the key to establishing methods of controlling and managing conflict is the communication process, and that communication should be the primary area for investigation. Jandt, for example, suggests that communication and conflict are inextricably tied together when he states that "only through communication can we engage in social conflict and the resolution of that conflict...social conflict is not possible without verbal or nonverbal communication". (p. viii)

Johnson (1974) extends this perspective:

> In order for a conflict to be managed constructively, there must be effective and continued communication among the involved parties. Communication is of basic importance in conflicts; through communication participants coordinate efforts at resolving their differences, provide information concerning their position and intentions, ventilate feelings, reason together, bargain, exercise influence, and expedite the development of settlements. (p. 64)

Keltner adds that "the control and management of the conflict processes depend

almost entirely on the control and management of the processes of communication". (p. 253)

Despite these recommendations and recent advances in communication and conflict research, the working premise of this investigation was that the understanding of the ways in which communication is or can be used to manage social conflict is insufficient. Researchers have yet to determine the relative efficacy of types or forms of communication in resolving interpersonal conflicts. More specifically, theorists have yet to consistently focus on what appears to be the crucial conceptual linkage between communication and conflict: the development of a mutually adjustive cooperative orientation. Deutsch (1969) suggests that such a cooperative orientation should lead to a productive and increasingly satisfying resolution, thus expediting the exchange of relevant information between the participants. In addition, this cooperative context should "encourage the recognition of the legitimacy of each other's interests" (Deutsch, p. 177) and minimize the salience of differences between the previously competitive, potentially destructive orientations.

While much of the published material in the conflict area discusses the theoretic advantages of developing a cooperative orientation between conflicting parties, little has been contributed to the exploration and development of communicative methods for initiating such an orientation. Johnson provides direction for future research in this area when he suggests that

> In order to begin building a theoretical model of communication effectiveness in conflict situations the concept "communication" has to be subdivided. The central research task is to establish the conditions under which certain types of messages...will be received in such a way as to influence the receiver's decision to respond cooperatively. (p. 67)

Thus, it seems most appropriate to begin to investigate the effects of specific forms of communication on the development of a cooperative orientation between parties to conflict and attempt to assess their effects on the management of con-

flict. To date, no research has focused on the effects of isolated forms of communication in conflict situations.

Two conceptual advances (Bach and Wyden, 1968; O'Neill and O'Neill, 1972) have been made outside of the field of communication, however, which appear to have heuristic merit for this investigation.

Psychotherapists Bach and Wyden have developed a system called "constructive fighting" which channels and utilizes interpersonal hostility and aggression to reinforce and stabilize interpersonal relationships. The authors characterize this constructive fighting approach as a cooperative skill, and suggest that it is a tool which leads people through the expression of violent feelings, paradoxically, to greater understanding of each other.

Inherent in this approach is the assumption that interpersonal conflict is inevitable and - if constructively managed - a potential source of strength for a relationship.

Successful application of Bach and Wyden's approach, however, requires more than an appreciation of the productive aspects of conflict. Parties to constructive fighting must also realize that communication is the primary process which facilitates the exchange of feelings, emotions, and beliefs. More specifically, the authors recommend the use of a particular form of communication; self-disclosure, which they frequently refer to as intimate communication. Implicit here is the suggestion that parties to conflict, through the open and honest communication of their true personal feelings, can effectively develop a cooperative orientation to their problems. Given such a cooperative bond it is suggested that interpersonal differences can be aired and constructively used to strengthen the relationship, rather than undermine or damage it by not expressing emotions openly.

O'Neill and O'Neill (1972) have developed the second conceptual advance in the

area of communication and conflict. It is a program of perceptual and behavioral modifications designed to successfully manage varied forms of social conflict between marital partners. Although these changes are suggested for married dyads, the primary emphasis is on conflict management and utilization, which are generalizable to many other types of relationships.

Based on numerous observations, interviews, and one reported experimental investigation (Kahn and Harper, 1972), the O'Neill's contend that "many couples believe that they know a lot more about one another than they in fact do know". (p. 106) As a result, partners tend to base their interaction upon unverified assumptions, their information-exchanges remain generally superficial and ritualized actual feelings and emotions are rarely divulged until crises develop, and both parties tend to become manipulative rather than spontaneous and open toward the other. The authors suggest that underlying many of these conflict-inducing circumstances is a mutual inability to communicate effectively, coupled with a limited understanding of the productive functions of conflict in a relationship. They contend that the key to developing an openly-trusting relationship, within which both parties are encouraged to interact and grow, is the communication process. More specifically, the authors claim that self-disclosing communication in particular will enable parties to conflict to reveal themselves, which they see as the most important means of knowing the primary self.

> We come to know ourselves even better through disclosing ourselves to others. Full disclosure of the self to at least one other significant human being... appears to be one means by which a person discovers not only the breadth and depth of his needs and feelings, but also the nature of his own self-affirmed values. (p. 110)

Derivatives of both self-knowledge and knowledge or familiarity with the other include the development of a more open, relaxed orientation, the mutual attribution of individual identity and equality, and the reduced need for the release of

aggression. As a result, a cooperative, problem-solving orientation develops when conflict arises. As the authors suggest,

> it should become more and more possible...to approach differences...as question of problem-solving, to be worked out by consensual agreement. The essence... lies in finding an answer that will benefit both partners and bring harm to neither one. (p. 128)

Common to both the Bach and Wyden and the O'Neill and O'Neill interpersonal programs are the assumptions that social conflict is inevitable and that self-disclosing communication is of pivotal importance in successfully channeling social conflict toward constructive results. A third similarity is that the success of both methods is contingent upon the development of a cooperative, problem-solving orientation between parties to conflict, which the authors claim should elicit the most consistent and successful responses to interpersonal conflict.

The research on self-disclosure offers additional evidence of its relational benefits. The most consistently-supported finding to date is that it is symmetrical Simply stated, it has been found that as disclosure by one person increases, so does that by the other interactant. This norm of symmetry has been consistently supported both in terms of the amounts of disclosure exchanged and in terms of the comparative intimacy of messages employed.

Ehrlich and Graeven (1971) manipulated self-disclosure by varying the intimacy of the disclosure messages and again verified a reciprocal effect. Highly intimate disclosures elicited highly intimate responses and messages low in intimacy tended to elicit correspondingly low-intimate responses.

Worthy, Gary, and Kahn (1966) found that the highest levels of disclosure were directed toward the most-liked other, whereas the least amount of disclosure was directed toward the least-liked. The final liking scores in this research were subjected to an analysis of covariance which revealed that subjects most liked

those others who had disclosed most to them. The authors concluded that being selected as a target for disclosure makes the other feel safe, indicates that the recipient is liked or trusted, and that increasingly intimate information is perceived as a receipt of an even greater reward.

Characterizing the receipt of self-disclosing communication as a reward forms the basis for the most prevalent interpretation of self-disclosure's symmetrical nature. This interpretation is based on Thibaut and Kelley's (1965) social exchange theory, the basic principle of which is that the outcomes exchanged by members of a dyad are of comparable value. More specifically, Thibaut and Kelley suggest that for dyadic relationships to be viable, members must provide each other with rewards and costs which compare favorable with both competing relationships and competing activities which are available to both parties. The perception by the recipient of self-disclosure that he has incurred a reward would thus obligate him to respond with similar amounts or types of disclosure, in order to balance the social exchange. As Altman and Taylor (1973) summarize, "mutual trust, rewarding exchange, projected future trust, and anticipated positive outcomes...seem to provide necessary conditions which facilitate reciprocity of exchange". (p. 55) Ultimately, it would seem, self-disclosure may be expected to effect a mutually cooperative, problem-solving orientation, through which conflict can be effectively and rationally controlled.

Researchers in communication and conflict have also neglected to investigate the effects of particular relational characteristics shared by parties engaged in conflict. Specifically, the attitude similarity-dissimilarity research appeared to offer both heuristic direction and additional conceptual support for this investigation. The attitude similarity variable has been investigated in terms of its effects on both attraction and persuasion. Both of these appeared to be conducive

to the development of a cooperative orientation between parties to conflict, thus leading to its investigation in this study.

More specifically, the research on attraction (e.g. Byrne, 1961; Byrne and Clore, 1966; Byrne, Clore, and Griffitt, 1967; Byrne and Griffitt, 1966; Nelson, 1965) has suggested that people who share opinions on issues provide each other with consensual validation; i.e. a rewarding payoff, hence an increase in the degree of attraction. This effect is functionally the same as that of the reciprocity norm of self-disclosure; both function to effect greater trust, comfort, and attraction between people.

Additional research on attitude similarity-dissimilarity (e.g. Back, 1951; Berscheid, 1966; Booth, 1971; Brock, 1965; Levanthal and Perloe, 1962) suggests that sources who are perceived as similar in attitudes to their audiences are more persuasive than those perceived as dissimilar.

When projected into a conflict setting, these findings appeared to suggest that attitude similarity between parties to conflict would effect both greater attraction and some form of an increased desire to respond favorably to communication from others regarding the issues at hand.

In summary, the attitude similarity construct appeared to suggest a complementary basis for prediction of the manner in which any communication - including self-disclosing communication - would be received and the subsequent conflict-reducing or conflict-intensifying behavior manifested. The purpose of this research then, was to suggest and experimentally test the effects of one specific form of communication, self-disclosure, and one relational characteristic, attitude similarity, on the reduction of interpersonal conflict, through the development of a cooperative orientation between conflicting parties.

Hypotheses

In general, the conflict-reduction research suggests that a cooperative orientation between parties to conflict is the preferred basis for the reduction and control of social conflict. Further, the literature suggested that self-disclosure should prove sufficiently dynamic to facilitate the development of this cooperative orientation by eliciting increased trust, openness, comfort, and attraction between conflicting parties. Thus, self-disclosure should have a substantial effect on conflict-reducing behavior. Therefore, the following hypothesis was posited:

H_1 : There will be a significantly greater amount of conflict-reducing behavior exhibited by subjects exposed to self-disclosing communication than by subjects exposed to non-disclosing communication.

Second, previous research has demonstrated that parties to a communicative interaction who have similar attitudes or opinions on key issues will tend to develop a reciprocally rewarding experience. As a result, they will become more receptive to communicative appeals from the other, including self-disclosure. Therefore, the following hypothesis was tested:

H_2 : There will be significantly greater conflict-reducing behavior exhibited by subjects with perceived attitudinal similarity than by subjects with perceived attitudinal dissimilarity.

The empirical and conceptual support for each of these hypotheses indicated that an interaction between self-disclosure and attitude similarity was tenable. More specifically, if self-disclosure could precipitate heightened perceptions of trust and attraction between the conflicting parties, and if attitude similarity could elicit increasingly receptive dispositions toward communicative appeals from the other, it seemed reasonable to expect an interaction between self-disclosure and attitude similarity. Thus, the following interaction hypothesis was tested:

H_3 : There will be a significanlty greater amount of conflict-reducing behavior exhibited by subjects with perceived attitudinal similar-

ity who are exposed to self-disclosing communication than by subjects exposed to any other combination of treatments.

Design

The experimental design employed in this research was the Posttest Only Control Group Design (Campbell and Stanley, 1963). Two independent variables were manipulated: self-disclosure and attitude similarity. The first variable, self-disclosure, had two levels: self-disclosing communication and non-disclosing communication which functioned as a control condition. The second variable, attitude similarity, had two levels: attitude similarity and attitude dissimilarity. Thus, there were four conditions in this experiment. The dependent measure for all conditions was the amount of conflict-reducing behavior.

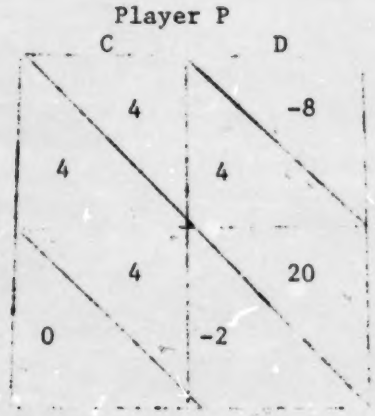
A total of sixty male and female subjects were randomly selected from lower-division communication courses. Fifteen subjects were randomly assigned to each condition.

Experimental Measures

The experimental task employed was the "Creative Alternative Game" (CA) developed by Steinfatt (1972). The CA game is played similar to the Prisoner's Dilemma game (Rapoport and Chammah, 1965), in which two players make repeated choices between alternative rows and columns. The combination of rows and columns in the payoff grid determines the amount of the payoff each of the players will receive. The CA game is distinguished from the Prisoner's Dilemma game, however, by a nonsymmetrical payoff grid, in which the payoffs for the two players are different. Also unique to the CA game is the condition that either player can guarantee himself a payoff of four units, player O by choosing row A, player P by choosing column C. Steinfatt and Miller (1974) further define a CA game as any matrix in which:

> (1) there exists only one rational choice for one player (O) but a mixed motive situation for the other player (P); (2) the choice of his best move by O must result in only one rational choice remaining for P; (3) the payoff to both players from this semi-forced solution must be equal; (4) the total payoff to both players must be a maximum when both fail to choose their rational alternative (for P this means the alternative that is rational when O chooses rationally) and should be on the order of twice the total payoff available from the mutual rational choice cell; and (5) neither player has fate control over the other if the other chooses his rational alternative. (p. 62)

The payoff grid is established as follows (Steinfatt and Miller, p. 61):



The rational strategy for player O is to consistently choose row A - (s)he cannot lose any points. Similarly, the rational strategy for player P is to consistently choose column C - (s)he cannot lose any points. Should either player deviate from the prescribed rational strategy - i.e. Player O choose row B or Player P choose column D - each would be risking the loss of points. Specifically, Player O's choice of row B could result in a loss of two points if Player O simultaneously chose column D. Similarly, Player P's choice of column D could result in a loss of eight points if Player O simultaneously chose row A.

There is, however, a creative alternative to the rational choice. One of the players may suggest that the b-d combination be chosen and the points earned divided between the two players. This way each player may receive more points than previously

would have been possible. In this study, the payoff matrix was identical to the one presented above. Subjects were awarded chips for each point earned in the payoff matrix.

Procedures

The procedures that were used for operationalizing attitude similarity are described below and were modeled after a method developed by Berscheid (1966).

Subjects signed up for individual 20-minute appointments with the experimenter two weeks prior to the beginning of the experiment. As each subject arrived for the appointment, (s)he was handed a sheet of topic statements which had been pretested as relevant and salient for students at the University. Each subject's attitudes on these topic statements were measured using three five-step, Likert-type scales (strongly agree to strongly disagree). Following completion of the questionnaire, the subject walked to the end of the room to hand them in and was informed by the experimenter that (s)he would be participating in playing a game as soon as another student arrived for the appointment. When the confederate arrived, (s)he apoligized for being late and was asked to fill in the same questionnaire. As the confederate turned the questionnaire in (s)he was shown a pad of paper upon which the experimental subject's responses to the topic statements were written. This was necessary because the confederate had to take, in his/her communication, a position either exactly similar or exactly opposite to that of the subject, depending upon which condition the experimental subject was to be assigned. When the confederate was seated the experimenter privately compared the two questionnaires and expressed verbal surprise at the pattern of responses. The experimenter explained that the reason for his reaction to the responses was (depending on the randomly-determined condition to which each subject was to be assigned) the unusually high degree of

similarity or dissimilarity of the attitudes expressed by the two individuals. The experimental subject was then offered the opportunity to explain his-her responses on the questionnaire. Based on research by Byrne et. al. (1967), attitude similarity dissimilarity was operationalized by controlling the degree of similarity and dissimilarity of attitudes on a given topic. Thus, attitude similarity was operationalized by the confederate expressing agreement with the identical attitude position of the subject. Attitude dissimilarity was operationalized by the confederate expressing and supporting a position dissimilar to but of equal magnitude to that of the experimental subject. For example, if the subject had expressed an attitude corresponding to the "agree" position, the confederate expressed an attitude corresponding to the "disagree" position. If, in the dissimilarity condition, subject responses fell in the third or "undecided" position, the confederate was instructed to take either of the polarized positions ("strongly agree" or "strongly disagree") and express dismay that the subject "didn't care enough" to have developed any particular attitude or feeling on the issue. Those subjects who were told that their attitudes were similar to the confederate's were assigned to the "perceived similarity" group, while those who were told that their attitudes were dissimilar to the confederate's were assigned to the "perceived dissimilarity" group.

Following assignment to the attitude similarity conditions, the experimental subject and the confederate were instructed concerning the rules of the game, adapted from Prisoner's Dilemma Game instructions used by Rapoport and Chammah (1965, Appendix 1). Subjects were told that any way they could maximize the number of chips they received was acceptable.

The players sat at a table facing each other, their vision obstructed by a tall divider extending the length of the table. The "payoff matrix" was affixed

to each side of the divider. In front of each player was placed a record sheet on which to record his choice on each play of the game. After each trial, the players revealed their choices to the experimenter, who acted as a croupier and awarded chips to each participant according to the payoff matrix. To provide increased but still ethical motivation to pay attention and play the game seriously, subjects were informed that any payoff chips won during the game would be redeemed for extra-credit points, to be figured into the midterm examination grade. Given that the midterm accounts for 35 percent of the semester grade, it was assumed that the potential reward of such points would elicit a serious, concentrated effort to win chips.

After receiving their instructions, the groups played four moves of the game to familiarize themselves with the procedures. For all of these moves, the experimental subject served as player O and the experimental confederate consistently chose the rational choice column, column C.

Following the first four trials the experimenter "ranout" of chips and was required to leave the room to obtain more. Prior to his departure, he encouraged the players to "introduce themselves further" and "get acquainted". At this time the confederate leaned around the divider to establish direct visual contact with the experimental subject and communicated one of the two communication conditions: self-disclosing communication or non-disclosing communication (the control condition To develop a valid self-disclosing stimulus, a message was constructed which incorporated the dominant characteristics of self-disclosing messages, as suggested by previous research. Specifically, it was designed to appear as an open and honest communication of information (Jourard, 1971) which the receiver would be unlikely to know or to discover from other sources (Pearce and Sharp, 1973). It was

intended to convey a concern for preventing future communicative misunderstandings, and to function as a request for cooperation (Dorris, 1972). In addition, this message was designed as a moderately-intimate communication, as suggested by Taylor and Altman's research on intimacy-scaled stimuli (1966) and Ehrlich and Graeven's research on intimacy-appropriateness (1971). The following message appeared to satisfy these criteria and was pretested by ten student-raters randomly selected from the same population as the experimental subjects. The raters read this message

> Hey look, I'm sorry if I'm out of it today, but I've been taking some pills to control my weight. So if I start to make you uncomfortable, try to understand, OK?

and evaluated it on five semantic-differential-type scales, bounded by the adjectives revealing/not revealing; self-disclosing/not disclosing; open/not open; candid/not candid; and frank/not frank. All of the descriptors for these scales were derived from the self-disclosure literature. The check on the experimental disclosure message was operationalized as a mean rating of 6.0 per scale. The ten student-raters produced a mean rating of 6.3 per scale, qualifying the above message as valid for this population. This message was employed. Immediately following the specific self-disclosure condition, the confederate suggested a compromise: if player O would agree to choose column B, the confederate would agree to choose column D and split the profits between them. Research by Steinfatt and Miller found that a split of 11 chips to player O and 9 chips to player P is most often negotiated, thereby equalizing each player's payoff at nine chips. Thus, the confederate made the suggestion of the 11-9 split in his proposal. Confederates were instructed and warned about "arriving" at this particular proposal too readily or comfortably, so as not to appear too familiar with the numerical mechanics of the matrix.

The cooperative selection of the B-D combination of rows and columns represented acceptance of an agreement and constituted the operationalization of the dependent variable, conflict-reducing behavior. The tally of the number of times the experimental subject selected row B served as his/her conflict-reducing behavior score. After the experimenter returned with additional chips, ten additional (experimental) trials were played, for which the confederate consistently chose column D. Thus, the conflict-reduction score for each subject could range from zero to ten. These values were entered into the larger design and served as the dependent measure.

Statistical Analyses

Each subject's conflict-reducing behavior score was entered into the appropriate cell of the two-by-two design and was subjected to a factorial analysis of variance. Alpha for this study was set at $p < .05$. Omega squared was computed for all F's.

Manipulation Checks

As a check on the self-disclosure manipulation, subjects were asked to rate the confederate for degree of self-disclosure on five, seven-interval semantic-differential-type scales: was very candid/was not candid; was very open/was not open; was very frank/was not frank; was very revealing/was not revealing; disclosed much about himself/disclosed little about himself. As in the pretest of the self-disclosure message, all of the descriptors in these scales were derived from the self-disclosure literature, which used them as synonyms for self-disclosure (see Ehrlich and Graeven, 1971; Gilbert, 1975; Jourard, 1964, 1971; Pearce and Sharp, 1973). Thus, the manipulation check on self-disclosure was completed by computing a *t*-test which incorporated data from all five scales. Results ($t = 11.75$; $df = 58$; $p < .001$) indicated that the self-disclosure induction was effective.

It was also desirable to have independent reason to believe that the similarity-dissimilarity induction was effective in producing the anticipated perceptions of the relationship with the confederate. Thus, the confederate was also rated on perceived attitude similarity by subjects using four semantic-differential-type scales: is a great deal like me/is very little like me; holds attitudes like mine/hold attitudes unlike mine; is similar to me/is dissimilar to me; believes as I believe/does not believe as I believe. The descriptors in these scales were all derived from previous attitude similarity research, which treated them as interchangeable with attitude similarity (see Berscheid, 1966; Brock, 1965; Byrne, 1961; Byrne, Clore, and Griffitt, 19660. In addition, the pilot study by Fahs (1974) factor analyzed these scales and found them to be highly and positively correlated (lowest correlation of .67). Thus, the manipulation check for attitude simmilarity-dissimilarity was completed by computing a t-test which incorporated the subjects' ratings from all four scales. Results ($t = 12.51$; $df = 58$; $p < .001$) indicated that the attitude similarity-dissimilarity induction was effective.

A third check was conducted to insure that the anticipated reward from the payoff chips was an adequate incentive for participants to take the game seriously. Subjects were asked to indicate their level of motivation to win chips on a set of two semantic-differential-type scales developed to measure such game playing incentive: I felt motivated to win many chips/I did not feel motivated to win many chips; I had much incentive to win many chips/I had no incentive to win many chips. These scales had been factor analyzed previously (Fahs, 1974) and shown to be highly and positively correlated. Sufficient incentive was operationalized as an average rating of 5.5 on each of the two scales. Subjects' ratings of their incentive to win chips produced a mean of 11.08, which was considered satisfactory.

Thus, it appeared that the experimental subjects felt sufficient incentive to win chips during the playing of the experimental game.

A final check was completed in an interview after the game-playing stage of the experiment. Subjects were asked to report what they believed the purpose of the exercise was, what they thought the game attempted to measure, and if they thought one could improve at playing this game with practice. All 60 subjects reported that they perceived their "opponents" - actually the experimental confederates - to be other introductory-level students, presumed to be working for extra-credit points. In addition, the interviews revealed that no subject identified the actual purpose of the experiment prior to being de-briefed. As a result, all 60 subjects were included in the data analysis.

Results

Hypothesis One

The first hypothesis posited a main effect for self-disclosure in reducing interpersonal conflict. The result of that test is presented in Table 1.

TABLE I

CELL SIZES, MEANS, STANDARD DEVIATIONS, AND ANALYSIS OF VARIANCE OF POSTTEST CONFLICT REDUCTION BEHAVIOR SCORES

CONDITION	n	MEAN	STANDARD DEVIATION
Disclosure/Similarity	15	9.00	3.64
Disclosure/Dissimilarity	15	7.93	2.95
No Disclosure/Similarity	15	3.46	3.01
No Disclosure/Dissimilarity	15	2.13	3.84

TABLE I (cont.)

CELL SIZES, MEANS, STANDARD DEVIATIONS, AND ANALYSIS OF VARIANCE OF POSTTEST CONFLICT REDUCTION BEHAVIOR SCORES

SOURCE	SS	df	MS	F
Disclosure	481.66	1	481.66	147.88*
Similarity	21.59	1	21.59	6.63*
Disclosure X Similarity	<1	1	<1	<1
Error	182.40	56	3.25	

*$p < .05$; $F_{.05} = 4.08$; df = 1, 56.

As Table I indicates, the main effect for self-disclosing communication was significant ($p < .05$, $F=147.88$). Given this significant F ratio, the null hypothesis of no differences was rejected in favor of the alternative substantive hypothesis that self-disclosing communication significantly differs from non-disclosing communication in eliciting conflict-reducing behavior.

The Omega squared test (Hays, 1963, pp. 406-407) was used to test for the amount of dependent variable variance accounted for by self-disclosure. This test revealed that self-disclosure accounted for 54 percent of the dependent variable variance.

Hypothesis Two

The second hypothesis predicted that attitude similarity would prove superior to attitude dissimilarity in eliciting conflict-reducing behaviors. Table 1 indicates that the main effect for attitude similarity was significant ($p < .05$, $F=6.63$). Given this significant F ratio, the null hypothesis of no differences was rejected in favor of the alternative substantive hypothesis that perceived

attitude similarity elicits greater conflict-reducing behavior than does perceived attitude dissimilarity.

The Omega squared test (Hays, 1963, pp. 406-407) was used to test for the amount of variance accounted for by the main effect of attitude similarity. This test revealed that the attitude similarity main effect accounted for seven percent of the dependent variable variance.

Hypothesis Three

The third hypothesis posited an interaction effect between the combination of self-disclosure and attitude similarity conditions in reducing interpersonal conflict. Table 1 indicates that the interaction effect for self-disclosure and attitude similarity-dissimilarity was insignificant. Given this insignificant F ratio, the null hypothesis of no interaction between combinations of treatments was accepted.

Discussion

The review of literature suggested that the understanding of the ways in which communication is or can be used to manage social conflict is insufficient. The significant main effect for self-disclosing communication in this study should be considered an initial advance toward satisfying this need. Further, self-disclosure's effect on subsequent conflict-reducing behavior suggests that even in a game theory paradigm which is designed to elicit win-lose orientations between participants, self-disclosure may function to effectively impede the usage of hostile or threat-oriented response strategies.

This result may also be interpreted as further support for characterizing the receipt of self-disclosing communication as a reward. That subjects exposed to self-disclosing communication responded with a significantly higher frequency

of conflict-reducing behavior appears to support the contention that outcomes exchanged by members of a dyad are of comparable value. In Thibaut and Kelley's (1959) conceptualization, the transmission of a self-disclosing message would be interpreted as both a cost-factor to the communicator and as a reward to the recipient. For Thibaut and Kelley's social exchange theory to hold, the subsequent response must also function as a cost to the respondent and as a reward to the subsequent receiver. The cooperative choices by the experimental subjects of the B row which carried with it a possibly negative payoff (-2 vs. +4) should be interpreted as a trusting, risk-based choice, i.e. an attempt to balance the social exchange.

Although the data provided support for the second hypothesis, the modest Omega squared result suggests that the substantive significance of the main effect for attitude similarity may be marginal. That is, although the statistical significance of the F ratio for attitude similarity technically supported the proposition that attitude similarity is an effective influence on the reduction of interpersonal conflict, the over-all strength of association between attitude similarity and conflict-reducing behavior is sufficiently weak so as to make interpretations and generalizations of these findings only provisional, pending replication.

The data failed to provide support for the third hypothesis. Thus, the results suggest that no systematic effects attributable only to the combination of self-disclosure and attitude similarity exist. Further, this combination of independent variables serves to explain none of the dependent variable variance, suggesting that the effects are additive. That is, the effect of any particular combination of these variables on conflict-reducing behavior is simply the sum of the effects of the particular levels of the variables involved.

Overall, the findings provide encouragement for continuing the investigation of the differential effects of self-disclosing communication and attitude similarity on the reduction of interpersonal conflict. The results also suggest numerous directions for future research. For example, the finding that both self-disclosure and attitude similarity function to reduce interpersonal conflict between parties with virtually no relational history is encouraging, if of limited generalizability. Future research can increase the overall generalizability of these findings by studying dyads with increased histories or with previously-established relationships. Methodologically, this will require that research in the experimental setting should at least allow time and interaction between participants for relations development prior to any experimental manipulations. For conducting future research on self-disclosure, a shift to research in field study settings would minimize the perceived risk to subjects by placing the disclosure transaction in a more stable and comfortable relational context.

Investigating varied types of relationships may also be of heuristic value. Social relationships such as friendships dating couples, and marriages, status-based relationships such as superior-subordinate or interaction between peers, and functional relationships such as buyer-seller or teacher-student all seem to be viable areas for future research. That is, the type of relationship may reveal unique appropriateness rules which interactants use in determining whether or not to disclose and which determine how they should interpret the disclosures they receive. Such research may allow for application of research findings to more specific settings.

Before research on either self-disclosure or attitude similarity is begun with specified types of relationships, however, more research is needed to establish

if sex-based differences exist which effect either a predisposition to self-disclose (as Jourard has begun to investigate) or tendencies to interpret the receipt of self-disclosing messages differently. Given that many relationships of interest are mixed-sex dyads or triads, this investigation of possible sex-based differences seems imperative.

In addition to further investigation of self-disclosure as an independent variable, determining ways in which self-disclosure can be elicited also seems to be an important, revealing direction for future research. Again, considering the type of relationship, the nature of the communicative context, and their possible interactive effects would appear to be a valuable extension of the investigation of self-disclosure.

Intimacy of content, as initially investigated by Gilbert (1974, 1975) may also be a feasible and revealing variable for future research. Although this current study maintained the intimacy of the disclosure message at a moderate level, the threshold for excessive intimacy in disclosure messages has yet to be determined. Both the type of relationship and the character of the interpersonal context appear to be essential covariates in such an investigation. A systematic study of the effects of differing levels of intimacy would appear to enhance the understanding of the relationship between intimacy of disclosure content and norm-satisfaction or norm-violation.

Overall, the impressive strength of the self-disclosure manipulation in this study indicates that extensions should be made in the conceptualization of self-disclosure, particularly regarding its influence potential. Investigation of the norm of reciprocity and the explication of both appropriate contexts and types of relationships within which it can be expected to function would appear to be of primary value at this time.

Despite Schelling's (1960) observation that the subject of conflict strategies is an academic no-man's land, the significant main effect for self-disclosure in developing a mutually cooperative, problem-solving orientation to conflict which facilitated the reduction of interpersonal conflict would appear to contradict such a statement.

The self-disclosure main effect should also be interpreted as support for future investigations of the effects of specific forms of communication in the conflict setting. If research establishes that certain forms of communication function effectively to link or dissociate interactants, the development of a theory of purposive, strategic communication will be advanced. As the understanding of the strategic use of specific forms of communication is advanced, the management or control of social conflict through instruction, arbitration, and negotiation should also be enhanced. This study represented an essential step in that direction

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